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Ref: 8EPR-N

Mr. Kerry Schwartz
Water and Environmental Resources Division
Manager, PRO-700
Bureau of Reclamation, Provo Area Office
302 East 1860 South
Provo, Utah 84606-7317

Re: Narrows Project Comments
SDEIS # 20100109

The U.S. Environmental Protection Agency, Region 8 (EPA) has reviewed the U.S. Bureau of Reclamation's Supplemental Draft Environmental Impact Statement (SDEIS) for the Narrows Project. EPA offers these comments in accordance with the Agency's responsibilities under the National Environmental Policy Act (NEPA) , 42 U.S.C. Section 4332(2)(C) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

Project Background

The Narrows Project is a new dam and reservoir on Gooseberry Creek, located on the Wasatch Plateau about 40 miles south southeast of Provo and 8 miles east of Fairview, Utah. The project will transfer water from Gooseberry Creek, a tributary to Scofield Reservoir and the Price River (Upper Colorado River Basin), to Cottonwood Creek, a tributary of the San Pitch River (Great Basin). The proposed project will deliver an annual average supply of 4,281 acre-feet of supplemental irrigation water and 855 acre-feet of water for municipal use to the Sanpete Water Conservancy District (SWCD). The water will be diverted through the existing Narrows Tunnel (which will be rehabilitated as part of this project) into a new 0.8 mile pipeline along Cottonwood Creek, eventually discharging into Cottonwood Creek. The diverted flow will be conveyed via Cottonwood Creek to two existing diversion dams. Two new irrigation pipelines (16 miles total) will convey the water to irrigation users in Sanpete County.

The SDEIS analyzes three alternatives: the proposed 17,000 acre-feet Narrows Project Dam and Reservoir, the mid-sized reservoir with a capacity of 12,450 acre-feet and the small reservoir with capacity of 7,900 acre-feet. Numerous mitigation measures have also been incorporated into the environmental analysis including wetlands restoration, minimum low stream flows in Gooseberry and Cottonwood Creeks, stream bank stabilization and flushing flows for Gooseberry Creek, fish habitat improvements and phosphorus removal measures to reduce the loading to Scofield Reservoir.

Comments on SDEIS

The Narrows Project has been under development for many years. The SDEIS is the third edition of the DEIS that EPA has reviewed over the years. In addition, EPA has reviewed several preliminary documents. As a result of these prior opportunities for review and comment, many of our previous concerns have been addressed in this SDEIS.

EPA's main overarching concern about this project has been and continues to be the significance of the project's environmental impacts. Specifically, the project is expected to result in the following impacts:

- Inundation of 1 mile of Upper Gooseberry Creek and 4.3 miles of small tributaries to Gooseberry Creek, a direct loss of 84 acres of high value montane wetlands;
- Direct impacts to 89 acres of waters of the U. S.;
- Inundation / flow modification of prized trout streams, including loss of important habitat for cutthroat trout;
- Reduction by 74% of annual flows on Middle Gooseberry Creek below the proposed reservoir and loss of spring flushing flows which maintain riparian habitat;
- Increase by approximately 200% of average flows on Cottonwood Creek in July and August; and
- Numerous impacts to Scofield Reservoir
    - Reduction in operating levels (10% reduction in reservoir surface area) and storage releases to Price River area; increased probability of fish kills due to low water levels.
    - Increase in trophic state towards eutrophication and increased phosphorus concentrations.
- Increased salinity in the Colorado River due to water depletion (increase of 0.54 mg/L, measured at Imperial Dam)

EPA comments on the SDEIS focus on the following four concerns:

- The need for more certainty regarding implementation of proposed mitigation measures to address the project's environmental impacts. We recommend that the FEIS provide more information on whether the proposed mitigation measures are required or are voluntary; and what will happen if the Sanpete Water Conservancy District (SWCD) is unable to implement the measures or if the measures are not completely successful.
- The need for more information to assess the potential effectiveness of the proposed mitigation measures to reduce phosphorus loadings to Scofield Reservoir to decrease the chance of fish kills. Further, more details should be presented on adaptive management and potential additional mitigation measures that may be needed to achieve loading reductions.
- Coordination of the NEPA environmental review with the application for a Clean Water Act § 404 permit for the discharge of dredged or fill material into waters of the United States associated with the project. The SWCD has applied to the U.S. Army Corps of

Engineers (USACE) for the CWA § 404 permit needed to construct the Narrows Project. The public notice process for the CWA § 404 permit ends shortly after the comment period for the SDEIS. EPA will provide separate comments on the draft CWA § 404 permit.

- The lack of disclosure of the cost of the proposed project to SWCD water users and taxpayers in Sanpete County.

These issues are discussed in more detail in the enclosed detailed comments, along with several recommendations to improve the disclosure of impacts in the FEIS.

Through the years, numerous mitigation measures have been developed for the project to reduce the environmental impacts of the proposed dam, reservoir, pipelines and transmountain division of water. Although, EPA is pleased to see all of the mitigation measures incorporated into the environmental analysis, we continue to be concerned by the inundation of 89 acres (for the proposed action) of wetlands and the riparian areas of Gooseberry Creek and its tributaries by the reservoir. The proposed project will potentially exacerbate the eutrophication problem in Scofield Reservoir, and the effectiveness of proposed mitigation to reduce phosphorus loadings is unknown. We therefore, continue to rate the project as "Environmental Objections" (EO) because of these impacts. The changes and new information added to this SDEIS addressed much of the information requested in our comment letter on the DEIS dated May 7, 1998. However, as discussed above and in the detailed comments, there are several areas of the environmental analysis that warrant development of additional information. We therefore are rating the document as a "EO-2", (Environmental Objections"- Insufficient Information). A description of EPA's EIS rating system is also enclosed.

Thank you for considering our input. We would like to schedule a phone call with the Bureau of Reclamation to discuss the concerns raised in this letter. If you have any questions regarding our comments, please call me (303) 312-6004 or you may contact Dana Allen of my staff at (303) 312-6870.

Sincerely,

Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection and Remediation

cc: Peter Crookston, Reclamation
Tim Witman, USACE

EPA's Detailed Comments on the
Narrows Project
Draft Supplemental Environmental Impact Statement (SDEIS)
June 2010

Implementation of Mitigation Measures

1. Section 2.2.2 (page 2-8) lists 11 fish and wildlife mitigation measures. We anticipate that the measures associated with the wetlands mitigation project(s) will be incorporated into the requirements of the CWA § 404 permit from the Army Corps of Engineers. For the rest of these measures and other mitigation measures discussed throughout the EIS, it is unclear if the measures will be required. Appendix F provides more details on the mechanics of implementation and the intent for SWCD to enter into memorandums of agreement (MOA) with the Utah Department of Wildlife Resources (UDWR), Forest Service and other parties for implementation and maintenance of the wildlife mitigation measures. Many successful mitigation measures have been implemented through agreements or other voluntary arrangements; however, it is important to disclose the voluntary nature of the mitigation in the FEIS.

   For example, in Appendix F, page F-2, #11, states that SWCD will fund and construct all 11 wildlife mitigation measures concurrently with the construction of other project facilities such as the dam. How will these conditions be implemented? For example, will the loan for the project be contingent on construction of these mitigation measures? Number 11 also states that the SWCD will be responsible for funding monitoring of the mitigation measures as outlined in the future MOA. The agency or organization charged with monitoring and maintaining the proposed mitigation will also be determined in the future MOA. Will the Bureau of Reclamation or any other governmental entity have the ability to require SWCD to fund, monitor or otherwise maintain the wildlife mitigation measures?

2. The FEIS should also describe how the flow mitigation measures were developed to offset reduced stream flows. For example, are the low flow requirements conditions of water right agreements or compacts? Are there specific chemical, physical or biological metrics that need to be met through the flow mitigation measures?

   Will there be any commitments to monitor the effectiveness of minimum low flows, flushing flows, etc? What will happen if the low flows are not sufficient to meet the biological needs of the fishery? The FEIS should include summaries of the future mitigation plans including more details on how the watersheds will be monitored for successful implementation and what kinds of adaptive management provisions will be developed for long-term success.

3. Strict mitigation success criteria must be set for the streambank restoration and wetland mitigation. As part of the criteria, a long-term inspection program should be put into place to assure that the measures remain vital. The text of the SDEIS provides an example of why an inspection program is vital (pages S-16 and 3-50). The phosphorus loading reduction project funded under CWA § 319 appeared to be working, but now the

landowners are no longer excluding livestock from the stream. In order to assure long term viability of the mitigation and attendant water quality improvements, the mitigation must be maintained and inspected regularly.

Phosphorus Loadings and Mitigation

4. The existing 2000 total maximum daily load (TMDL) for Scofield Reservoir identifies total phosphorus and consequent low dissolved oxygen (DO) as pollutants of concern that have contributed to impairment of the cold water species beneficial use. The TMDL called for a reduction in the total phosphorus load (by 1,881 kg/yr); however, it is unclear whether this load reduction has been achieved. Further, the 2006 eutrophication study indicated a small projected increase in the phosphorus concentration in Scofield as a result of the proposed project (due to changes in loading and reduced flow from Fish Creek).

   Water quality concerns regarding the phosphorus loading and potential changes (as a result of the proposed project) in Scofield Reservoir highlight the need for more current water quality data. With the exception of the eutrophication study (which included data for the period 1978-2005), it appears that the most of the data used in the SDEIS are almost 10 years old (or older). For example, is the streambank restoration work accomplished under the CWA § 319 and 314 programs for phosphorus reduction reflected in the water quality data?

   There is clearly a need for more current data to characterize "current" conditions, to establish a baseline to measure mitigation success, and to update the evaluation in the 2000 TMDL. We recommend that a water quality monitoring program be developed and implemented as part of preparing the FEIS and for evaluating the success of proposed mitigation measures. The first sets of data should be used to verify existing water quality conditions in Scofield Reservoir and its tributaries in the FEIS. The long-term water quality monitoring program would be used to verify the success or failure of the proposed mitigation measures to reduce phosphorus loading and to update the TMDL for Scofield Reservoir.

5. The FEIS should more specifically define the phosphorus reduction goal for the proposed mitigation measures to reduce the phosphorus loading to Scofield reservoir. The monitoring plan discussed above (and potentially the proposed TMDL revision) should be used to identify a specific loading to be removed or a percent reduction. The current TMDL recommends a 28% reduction, however it is not clear how or where that reduction would be measured. The proposed monitoring program should define the specific measurements and monitoring locations that will be used to evaluate the effectiveness of (1) narrowing and improving fish habitat on Gooseberry Creek between the Narrows and Lower Gooseberry Reservoirs, and (2) fencing out livestock and stabilizing stream segments for 9.5 miles of stream segments tributary to Scofield reservoir (Table 3-13 on page 3-44 and page 3-60) to reduce external phosphorus loading. An adaptive management plan should be included in the monitoring program to define further mitigation should it be necessary to achieve loading reductions.

Costs of Narrows Project to Sanpete County Water User and Taxpayers

6. The construction cost of the Narrows Project is estimated at around $40 million (Table 2-5, page 3-31). We recommend that the FEIS include information on the cost of the project to residents of Sanpete County. It appears that the SWCD is funded through property taxes and water use fees to irrigators and municipalities; however it is unclear how the proposed project will increase mill levies and user fees. We understand that the final financial arrangements are unknown, so we recommend that the section address a range of potential costs and likely funding sources. The cost estimate should also include operations and maintenance of the Narrows Project and associated mitigation measures.

7. We recommend expanding the information regarding the Small Reclamation Project Act (SRPA) in Section 2.1 of the SDEIS to explain the connection between requirements of the SRPA, future legislation authorizing the loan and the cost of the project to Sanpete County taxpayers and water users.

   For example, on page 2-2, the second bullet in the first column states "Loan repayment must use 100% of the project's irrigation amortization capacity . . . ." Will this condition affect the user rate structure or does this condition only apply in evaluating potential project alternatives?

Wetlands, Coordination with the 404 Permit

8. We recommend that the wetlands and mitigation sections in the FEIS be updated to reflect any changes or decisions that have been made as part of the CWA § 404 permit process.

9. We recommend that wetlands mitigation opportunities be identified along Fish Creek or Gooseberry Creek upstream of Scofield Reservoir. In addition to increasing the acres of wetlands mitigation, this type of mitigation will also help reduce discharges of phosphorus and sediment.

10. We recommend improving coordination between the NEPA and the CWA § 404 permit processes. Are there any off-channel reservoir sites that could be considered a "least environmentally damaging practicable alternative" (LEDPA) under the 404 permit regulations? Appendix B lists possible reservoir sites, but they all appear to be on channel, and potentially as environmentally damaging as the preferred alternative. We understand that selecting a reservoir site other than the Narrows site may require the renegotiation of the 1984 Compromise Agreement, however this renegotiation is not a basis for determining that an alternative is not practicable. We recommend that the FEIS include more information about the "practicability" issues of other potential reservoir sites. For example, how would the cost of pumping affect user fees? Would the project still be affordable for some users?

    The SDEIS also infers that some of the funding sources are linked to the fish and wildlife mitigation measures. Would these funding sources still be available if the reservoir was located at one of the other sites?

11. We recommend that the BOR require more than the current mitigation ratio of slightly higher than 1:1. While a 1:1 ratio may be appropriate for wetland creation, for restoration mitigation we recommend a minimum ratio of 2:1.

Other Comments

12. We recommend that the FEIS disclose potential impacts from the conversion of Narrows Project water from irrigation to residential development. For example, will the new residential development impact any resources of concern?

13. As described in the SDEIS, water from the Narrows Project will be increasingly used for municipal water supply. Although there are no specific water use data for Sanpete County, it is anticipated that water consumption will be similar to the rest of Utah with a use of 270 to 281gallons per capita per day (pages 1-7 & 1-9). Water use is very high in Utah due to outdoor irrigation; only about 70 gallons per capita per day will be used inside the home. We recommend that mitigation measures be developed to reduce residential consumption of water such as those described in "Utah's M&I Water Conservation Plan, Investing in the Future", July 2003. We also recommend that the mitigation plan incorporate some of the concepts of sustainable communities such as: preserving agricultural land, mixed-use developments or cluster developments reducing irrigated landscaping and preserving unirrigated open space. These types of development have an added bonus of reducing infrastructure costs.